Info-Hams Digest   Thu, 18 Mar 93   Volume 93 : Issue 345

Today's Topics:
                         Alinco fax number
                   A question about interference
          Daily Solar Geophysical Data Broadcast for 18 March
                 Just for fun . . . someone's screw up
                     Kenwood TH78A vs. Alinco DJ580
                Matching antennas to low cost receivers?
                         need help in Poland
                           new bug user
                         Tube Trivia: 811A
        WARNING: Potential Major Solar Flare Warning - 19 March
                     Welcome to rec.radio.info!

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

What is the fax number for Alinco tech support?

Thanks.

--
Connect 3141592653590/V93Ter/LapLAND/Mnp666/Vryfast

squrppi@krk.fi
OH2KEA (KP 20 KF)

Date: 18 Mar 93 22:24:30 EST
From: europa.eng.gtefsd.com!darwin.sura.net!wvnvms.wvnet.edu!un027713@uunet.uu.net
Subject: A question about interference
To: info-hams@ucsd.edu

I have a question on the topic of interference to home entertainment
equipment and I'm hoping that the net.wisdom can come to my aid.

I know that I must prevent harmonics from my rigs from causing interference
to others. But, I found out that the carrier for CABLE channel 18 is in the
2-meter band (it comes in on my HXT-202). I'm guessing that if I transmit
on this frequency (I can't test this yet, I'm still waiting for my ticket) I
may cause interference to my TV on that channel.

My question is...who is legally responsible for cleaning up the interference?
I know that as a responsible ham, I should work with my neighbors to help clear
clear up any problems even if it's not my responsibility. But since I would be
operating within the 2-meter band, would the cable co. be responsible for
preventing my signal from entering their system?

Any opinions?

Jack (5 weeks and waiting)

Date: 19 Mar 93 04:16:33 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 18 March
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 077, 03/18/93
10.7 FLUX=110.7 90-AVG=135   SSN=098   BKI=4443 2211 BAI=014
BGND-XRAY=B2.4   FLU1=1.7E+07 FLU10=1.6E+04 PKI=5453 3222 PAI=018
  BOU-DEV=056,044,045,021,011,010,008,006   DEV-AVG=025 NT   SWF=00:000
 XRAY-MAX= C3.2   @ 1521UT   XRAY-MIN= B1.2   @ 0703UT   XRAY-AVG= B6.8
NEUTN-MAX= +005% @ 0245UT   NEUTN-MIN= +000% @ 2330UT   NEUTN-AVG= +1.2%
  PCA-MAX= +0.2DB @ 0225UT   PCA-MIN= -0.3DB @ 0255UT   PCA-AVG= -0.0DB
BOUTF-MAX=55428NT @ 0006UT   BOUTF-MIN=55367NT @ 1919UT   BOUTF-AVG=55396NT
GOES7-MAX=P:+113NT@ 1845UT   GOES7-MIN=N:-001NT@ 0027UT   G7-AVG=+079,+045,+011
GOES6-MAX=P:+126NT@ 1845UT   GOES6-MIN=N:-114NT@ 0653UT   G6-AVG=+093,-003,-057
 FLUXFCST=STD:130,130,125;SESC:130,130,125 BAI/PAI-FCST=015,020,020/015,015,025
    KFCST=3214 5122 3214 5245 27DAY-AP=007,024   27DAY-KP=3032 2111 3355 4334

```
 WARNINGS=*MAJFLR;*SWF;*PROTON
    ALERTS=
!!END-DATA!!
```

NOTE: The Effective Sunspot Number for 17 MAR 93 was 62.0.

>two men had their mike keyed on channel 16 and tied up all
>use of that channel

This happened once to our repeater when we were chasing clouds (we get
some fantastic T-storms along the Front Range in Colorado, but that's
another story.) What happens is that somone who was talking lays down
their microphone. The microphone finds its way downhill to the human
posterior where it eventually gets sat upon and keyed up.

Depending on the relative power being used, the only real possibility is
for a strong station to override the unintentional interference (FM
capture is wunnerful) and move the Net to another frequency. In this
case, the Coast Guard could have periodically announced that emergency
traffic should go to another channel until 16 cleared up. An operation
like the CG should really have beam antennas and a couple hundred watts
for an emergency but I suppose they haven't thought of that eventuality.

Perry / AA0ET

Anthony S. Pelliccio (system@garlic.sbs.com) wrote:
: Yes, re: Alinco Quality... it sucks. Their battery rails stink, you

What's wrong with its battery rail? I find it quite easy to use and
still the battery is well fitting in locking position.

: can't charge the battery on the 580 at the same time as you're running
: off a power supply (you can do this on a Kenwood), and the microphone on

560 can be operated (using the battery) while the charger is connected. In
580 when I use my power supply, I simply detach the battery and place it in
the battery charger (which cames in the package). I don't find this operation
annoying.

: a DR-599T is flimsy! I'll NEVER buy anything made by Alinco. Either

What is DR-599? It sounds familiar but I can't remember..

I'm using a microphone I bought once from a cheap electronics store and
modified it to fit Alinco. No problem here. Also a person who has operated
both Icom and Yeasy said that Alinco's input AND output audio are both
better than in his rigs. Yeasu's monophone fits Alinco (tested).

My father bought also the DJ-580 after using mine and comparing the
others. "It has all what I need and what I can imagine I'd ever need in
the real world for a handheld."

The DJ-580 is great! It's easy to use, works fine and is comfortable in
hand. If using 5 watts output power it doesn't get "too hot to touch" like
what-was-it-again Icom.
--
Connect 3141592653590/V93Ter/LapLAND/Mnp666/Vryfast

squrppi@krk.fi
OH2KEA (KP 20 KF)

Date: 18 Mar 93 03:09:49 EST
From: newsflash.concordia.ca!nstn.ns.ca!psinntp!psinntp!arrl.org@uunet.uu.net
Subject: Matching antennas to low cost receivers?
To: info-hams@ucsd.edu

The reason why receiver matching isn't important in many cases is that
noise masks any possible improvement. My favorite analogy is the
hearing aid at the rock (heavy metal?) concert. You have to be
awfully deaf need them in such a noisy place. For some people,
earplugs (attenuators) would help :-).

But, if you have little background noise, receiver matching can be just
as important as transmitter matching. Man made noise is significant
up to at least 2 meters in many places. Thus, you often have to be a
UHF/microwave/EME type to notice this. (EMEers have big antennas
that don't pick up as much noise when pointed at the right part of
the sky). Incidentally, one way of testing preamps is to note the
amount of quieting on FM--the better preamp will have more quieting on
a weak signal. S meter indications *are* meaningless.

Wait, I thought of two exceptions--the pegged needle indicating an
oscillating preamp and when you get no signal indication on anything,
indicating a dead preamp.

In rec.radio.amateur.misc, jones@sj.ate.slb.com (Clark Jones) writes:
>:
>The usual wisdom in the Ham radio world is that antenna matching is far
>more important for the transmitter than for the reciever. As a single data
>point, I've noticed that there's around 10dB difference in signals coming
>from my old R-390 reciever between when I have the reciever connected to
>the antenna through the antenna tuner vs. directly connected to the
>antenna.
>
>All reciever circuits work at much lower levels, and so can tollerate having
>part of the signal "bouncing" back towards the antenna.

Actually, many "high performance" HF receivers have high input
SWRs. There are techniques for getting a low noise receiver and good
SWR at HF, but these are patented. More importantly, they usually don't
offer enough of an improvement to be worth paying someone to use them.

Zack Lau KH6CP/1

Internet: zlau@arrl.org   "Working" on 24 GHz SSB/CW gear
                          Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab   80/40/20 CW
     225 Main Street   Station capability: QRP, 1.8 MHz to 10 GHz
     Newington CT 06111   modes: CW/SSB/FM/packet
                                      amtor/baudot
Phone (if you really have to): 203-666-1541

Date: 19 Mar 93 04:28:26 GMT
From: swrinde!gatech!asuvax!ncar!csn!ub!acsu.buffalo.edu!bowen@network.UCSD.EDU
Subject: need help in Poland
To: info-hams@ucsd.edu

I got the attached request for packet assistance from Poland. It's a
bit out of my area but I told him I would post it for him. The mail
headers are a little screwed up but his address appears to be

     slawiec@usctoux1.cto.us.edu.pl

If someone here could help him out I'm sure he'd appreciate it.

Devon

Date: 19 Mar 1993 05:04:51 GMT
From: sdd.hp.com!cs.utexas.edu!geraldo.cc.utexas.edu!geraldo.cc.utexas.edu!
usenet@network.UCSD.EDU
Subject: new bug user
To: info-hams@ucsd.edu

Ah, bugs ...

I can tell you why you like bugs. You say that keyers send good code. Yep,
they sure do ... but they have 0 personality. I don't even consider keyboards.
That is the highest form of cheating when sending cw.

Bugs, and generally, old radios, have more personality to me. Can't explain
more than that...

Someone sent me some very good instructions for adjusting a bug. I'll dig
'em up and post them here. I used them and my bug works really well now.
As for sending, it didn't take me long at all. I have a pretty good feel for
cw though, and I really love to operate it.

I do have one question about bug parts though...it has to do with the rubber
feet on the bug. Mine aren't glued so well, and they don't keep the bug from
sliding around on the table. Does anyone have suggestions for re-footing
a bug?
--
Buddy Brannan, KB5ELV, Riff-Raff #4
The World's Youngest Old Fart :-)
Internet: davros@ccwf.cc.utexas.edu
"One foot in a brave new world, one foot still in bed ..."
--from Those Who Dig: "Mr. Banana Head"

Date: Wed, 17 Mar 1993 20:56:50 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpfcso!perry@network.UCSD.EDU
Subject: Tube Trivia: 811A
To: info-hams@ucsd.edu

> OK, all you tube buffs, just exactly how tall is an 811A tube, minus the
> pins? I want to stuff them into a tight space.

I got my answer. Thanks to all that responded.

Perry

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            /\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\

                POTENTIAL MAJOR SOLAR FLARE WARNING

                   ISSUED: 04:00 UT, 19 MARCH

            /\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
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PRIMARY CANDIDATE FOR HIGH SOLAR ACTIVITY : REGION 7448 (N17W22@00Z,19MAR)

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  ------------------------------------------------------------------------
|    ESTIMATED POTENTIAL MAGNITUDE OF ENERGETIC ACTIVITY OVER NEXT 7 DAYS   |
|--------------------------------------------------------------------------|
| DAYS |   C5.0   |   M1.0   |   M5.0   |   X1.0   |   X5.0   |   >X12.0   |
|------|----------|----------|----------|----------|----------|------------|
|1(+) G|   90 %   |   50 %   |   35 %   |   10 %   |   1 %    |    0 %     |
|3( ) G|   95 %   |   60 %   |   40 %   |   15 %   |   1 %    |    0 %     |
|5(-) G|  100 %   |   60 %   |   40 %   |   15 %   |   1 %    |    0 %     |
|7(-) G|  WLT %   |  WLT %   |  WLT %   |  WLT %   |  WLT %   |   WLT %    |
  ------------------------------------------------------------------------
```

DAYS = Number of days (from present) into the future (1, 3, 5 and 7 days).
(+) = Primary candidate region expected to GROW and DEVELOP.
( ) = Primary candidate region expected to STABILIZE or remain STABLE.
(-) = Primary candidate region expected to DECAY and SIMPLIFY.
(x)P = Possible proton and/or PCA threat. (x) may be one of (+), (-), or ( ).
(x)G = If a favorable major flare develops, a moderate to high probability
        exists that the event may be geoeffective.
xx % = Probability of activity equalling or exceeding the given x-ray class
        sometime over the next number of DAYS.
WLT = Data not applicable due to the West Limb Transit of the target region.

The above chart should be used as a guide only. It represents anticipated
levels of activity based on current projections of region development.
Actual conditions may, of course, differ from these projections.

SYNOPSIS:

     Over the last 24 hours, Region 7448 has taken on additional complexity.
New positive polarity flux has emerged to the south of the region and a pole
of negative polarity flux has developed to the east of the older trailer
spots. Shear has also increased notably along the trailing neutral line.
These factors, combined with an increase in plage intensity and the formation
of a delta configuration in the trailer spot complex may be sufficient
indicators to suspect a possible major flare from this region over the next
several days.

     Recent x-ray plots show minor C-class flare activity beginning to
increase in frequency and magnitude. The region is presently 250 millionths
in area in an EAI optical configuration. The group is now classed a
beta-gamma-delta group with a dominant east-west oriented neutral line and
building gradients near the emerging flux.

     This warning will remain active until 24 March when it will be allowed
to expire, unless earlier cancellation is warranted.

                    /\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\

Date: Thu, 18 Mar 1993 20:38:27 MST
From: gumby!destroyer!cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!ersys!ve6mgs!
rec-radio-info@yale.arpa
Subject: Welcome to rec.radio.info!
To: info-hams@ucsd.edu

Archive-name: radio/rec-radio-info/welcome
Last-modified: $Date: 1993/02/14 09:17 $
Version: $Revision: 1.02 $

*** Welcome to rec.radio.info! ***

Welcome to rec.radio.info, a group that aims to provide a noise-free source
of information and news for the entire rec.radio hierarchy.

Two introductory articles about rec.radio.info are posted to the group and
to news.answers every two weeks. You are now reading the first article, which
explains what rec.radio.info is, and answers some Frequently Asked Questions.
The second article is titled "Submission Guidelines", and you only need to
read it if you want to submit an article to rec.radio.info.

  -- What is the purpose of rec.radio.info?

The purpose or charter of rec.radio.info is to provide the Usenet community with a resource for information, news, and facts about any and all things radio.

All the other rec.radio groups are intended for discussions and general chit chat about radio. Rec.radio.info will contain informational, factual articles only. Follow-ups are redirected to an appropriate other group, and further discussion (if any) will not take place in rec.radio.info.

In order to ensure that rec.radio.info contains only appropriate articles, it was decided to create the group as a moderated newsgroup.

 -- Why are messages almost always cross posted to rec.radio.info?

It provides a "tag" for each article to be assembled into a filtered presentation in rec.radio.info (even with cross-posting, only one message, with a unique Message-ID, is propogated across the net). This tag also facilitates a pre-existing method of dropping or cancelling the articles locally within the discussion groups if you don't want to see them. This accommodates individuals who want to separate the bulletins from the discussions, discussions from the bulletins, as well as those who are adamant about not reading another newsgroup and wanted to see everything all in one basket.

With the total size of Usenet (in number of newsgroups and total traffic) doubling every year or so, this is no insignificant contribution to reducing information noise and chaos. Making the discussion groups a catch-all, and making extra newsgroups filters on that catch-all, is also the most realistic way to implement such a scheme (It's not intuitively obvious what the charter, contents, and general appropriate topics for each and every newsgroup are. Seeing FAQ's and charter/intro postings in the home newsgroup is beneficial for new readers).

By cross-posting one only is adding a few tens of bytes to each bulletin (to specify the extra group on the Newsgroups line), but are adding the capability for very powerful filtering features available on most news servers and readers. Your local news guru could probably explain these features in more detail.

 -- What is a 'follow-up', and what does 'moderated' mean?

If you are new to Usenet and are not familiar with the terminology, you might want to read the general introductory articles found in the newsgroup news.announce.newusers. Doing so will make your life on the net much easier, and will probably save you from making silly beginner's mistakes.

If you think that at this moment you are reading an echo, a conference, or a bulletin board, I'd also strongly suggest a trip over to news.announce.newusers.

For the rest of this article, I will assume you have a basic knowledge of
Usenet terminology and mechanics.

 -- OK, so now I know what 'moderated' means. Tell me more.

Rec.radio.info is a moderated newsgroup, which means that all articles
submitted to the group will have to be approved by the moderator first.

The current moderator of the group is Mark Salyzyn. Submissions to
rec.radio.info can be posted, or e-mailed to:

        rec-radio-info@ve6mgs.ampr.ab.ca

Comments, criticisms, suggestions or questions about the group can be e-mailed
to:
        rec-radio-request@ve6mgs.ampr.ab.ca

But before you do so, please be sure to check out the "Submission Guidelines"
article.

The influence of the moderator should be minimal and of an administrative
nature, consisting chiefly of weeding out obviously inappropriate articles,
while making sure correct headers etc. are used for the appropriate ones.

 -- What type of material is considered inappropriate?

There are three broad categories of articles which will be rejected by the
moderator:

1) Requests for information: rec.radio.info is strictly a one-way street. I
   receive information in my mailbox; I then post it to rec.radio.info.
   Requests for specific information belong in the normal discussion newsgroups.
   If your request gets answered, you might consider passing the answer on to
   rec.radio.info, though. Especially if you can edit it into a informational,
   rather than a discussion, format.

2) Obvious discussion articles, or articles that appear unsubstantiated.

3) Commercial stuff: a relatively unbiased test of a radio product would be
   accepted, but any hint of for-profit might be reason for rejection. For three
   reasons: This is not the purpose of the list, for-profit is a controversial
   topic, and this list may be passed onto Amateur Packet Radio (where
   for-profit is prohibited except under certain provisos).

   rec.radio.swap may be more deserving of the posting in any matter.

   Similarly, copyrighted material generally cannot be used. If it's TRULY
   worthwhile to the net, I would recommend obtaining permission from the

copyright holder. Please note the source, and if permission was given. I
reserve the right to make the final decision concerning appropriateness in
all situations. In most cases, a brief summary of, or pointer to, the
copyrighted information may be all I can allow.

 -- I do not have access to news, how can I get the information posted to
    rec.radio.info?

brian@UCSD.EDU (Brian Kantor) has kindly supplied a mail list server for
rec.radio.info. Non of the articles will be digested, due to their size, so
you will receive individual mailings for every article posted to the group.

Mail sent to radio-info@ucsd.edu will be forwarded to the moderator and
thus is an alias to rec-radio-info@ve6mgs.ampr.ab.ca

To subscribe and unsubscribe via the listserver; the format for that is

     sub address radio-info
     unsub address radio-info

where 'address' is your full mailing address. Send this request to

     listserv@ucsd.edu

Note that the server will automatically delete any address that bounces mail.
If you leave the address portion blank, it will try to deduce your address
from the mail headers. This may not work if you are on bitnet, milnet or
some other non-Unix host, so it is recommended to put your return address
in any case. For example:

     sub mymailbox@myhost.mydomain.mil radio-info
or
     sub MEMEME01@DMBHST.bitnet radio-info

or something like that.

 -- Will the material appearing in rec.radio.info be archived somewhere?

Yes. Still firming up details at the moment but here is a preliminary list:
     - unbc.edu as maintained by Lyndon Nerenberg <lyndon@unbc.edu>
     - nic.funet.fi maintained by Risto Kotalampi <rko@cs.tut.fi>
          saved to /pub/dx/text/rec.radio.info currently stored as
          numbered files.

Effectively this means that anything you post to rec.radio.info will be
permanently stored, so your work will not be lost.

 -- I have a regular posting with timely information, is there a way to

speed up it's delivery, or automate for more convenience?

Yes, there is! It may take a bit of chatter with the moderator, but we are
willing to take responsible people and provide them the means of posting the
articles directly from their site. We will try everything we can as we fully
realize that DX (distant signal) and astronomical data can be somewhat
transitory. We are also willing to allow regular posters of information the
same courtesy, even if the information is not as timely.

We refer to this as self-moderation, which is partly based on the model for
news.answer. This requires co-operation and good will to be beneficial to
the community in the rec.radio hierarchy.

I suggest reading the posting guidelines for more information. I am open to
suggestions.

I thank the following individuals for their input into this article:
     rec.music.info moderator Leo Breebaart rec-music-info@cp.tn.tudelft.nl
     rec.radio.broadcasting moderator Bill Pfeiffer wdp@gagme.chi.il.us
     Paul W. Schleck, KD3FU pschleck@unomaha.edu
     Ian Kluft, KD6EUI ikluft@uts.amdahl.com

--
Mark Salyzyn -- Moderator rec.radio.info
Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca
Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca
* Requests for information do *not* belong in rec.radio.info *

Date: Fri, 19 Mar 1993 05:32:20 GMT
From: swrinde!emory!athena!aisun3.ai.uga.edu!mcovingt@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Mar17.011208.21264@sequent.com>,
<1993Mar17.173912.12800@convex.com>, <C426zJ.8BL@amdcl2>
Subject : Tuning SSB; was: Repair my...

In article <C426zJ.8BL@amdcl2> brian@amdcl2.amd.com (Brian McMinn) writes:
>tonyp@convex.COM writes:
>>   I'd like to know HOW they can tell that you are off frequency
>>   when you're operating Silly Side Band, with full carrier suppression,
>>   and they don't know what your voice sounds like...
>
>I've often pondered this myself. With a little practice, a human can
>tune SSB quite accurately, even without knowing what the sender's
>voice sounds like. There must be some information embedded in the
>signal that allows this. Here's how I think it works:

>[total speculation mode on]
>Consider the human voice -- each individual sound in a sentence has a
>distinct frequency spectrum (ie, Fourier transform). This spectrum is
>largely, but not exclusively, composed of harmonics of some small
>number of fundamental frequencies. For example, if A represents a
>200Hz sound, a word-sound might contain A, 2A, 3A and 4A frequency
>components.
>In a poorly tuned SSB signal, these will come out as A+e, 2A+e, 3A+e,
>and 4A+e frequency components. Notice that they are no longer
>harmonics of each other! I'd bet that your brain learns to cue off
>these harmonic discrepancies in order to tune SSB.

I think the truth is something rather different. There are _lots_ of
harmonics. A deep-voiced male may have a 50 Hz fundamental with harmonics
up to 5000 Hz or more.

Certain bands of harmonics -- called "formants" -- are emphasized by
the vocal tract. For example, there might be a band of strong harmonics
between 1000 and 1500 Hz when you make a particular speech sound.

Now then. Although the _fundamental_ freq. varies a lot from individual
to individual, the formant frequencies don't vary nearly so much.
We understand speech mainly by listening to formants. And if SSB is
mistuned, the formants are in the wrong places.

I'm a linguist; I studied all this many years ago, although my main work
nowadays is in syntax and semantics.

73 de N4TMI

--
:- Michael A. Covington   internet mcovingt@ai.uga.edu :   *****
:- Artificial Intelligence Programs   phone 706 542-0358 : *********
:- The University of Georgia   fax 706 542-0349 :   * * *
:- Athens, Georgia 30602-7415 U.S.A.   amateur radio N4TMI : ** *** **

Date: Thu, 18 Mar 93 20:37:37 EST
From: @searn.sunet.se:slawiec@usctoux1.cto.us.edu.pl
>From slawiec Thu Mar 18 14:23:34 1993
From: Mariusz Slawiec <slawiec@usctoux1.cto.us.edu.pl>
X-Mailer: SCO System V Mail (version 3.2)
To: bowen@cs.buffalo.edu
Subject: pocket or ham radio for internet transmission inf. request fr. Poland
Date: Thu, 18 Mar 93 14:23:34 cet
Message-ID: <9303181423.aa00693@usctoux1.cto.us.edu.pl>

Dear Sir,

I am especially interested in establishing local area pocket or ham radio
internet transmission for a group of scientists from a university in Poland.\
I have no idea how to start such works , where to oder necessary equipment
or hardware, any suggestions and opinions how it works in he States
would be welcome.
your sincerely,
Slawiec,M.Sc.

Or please forward my request to a respecting discussing list or concerned mbody.

End of Info-Hams Digest V93 #345
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